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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 11/697,263  
Filing Date: April 05, 2007  
Appellant(s): BAHL ET AL.

\_\_\_\_\_  
Weiguo Chen and Yanbin Xu  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed February 15, 2011 appealing from the Office action mailed July 19, 2010.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The statement of the status of Amendments After Final contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The Summary of Claimed Subject Matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's Grounds of Rejection to be Reviewed on Appeal contained in the brief is correct.

### **(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the appellant's brief.

### **(8) Evidence Relied Upon**

US-2004/0147266 A1	Hwang et al.	07-2004
US-2004/0073928 A1	Alakoski et al.	04-2004
US-2004/0266440 A1	Fuchs et al.	12-2004

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 20040147266 (hereinafter Hwang) in view of US Patent Application Publication 20040073928 (hereinafter Alakoski).

Consider claims 1, 23, Hwang discloses "A method for activating a Multimedia Broadcast/Multicast Service (MBMS) in a network" (see ¶ [0085], and Fig. 9A), "the network comprising at least one Serving GPRS Support Node (SGSN) for connecting user equipments (UE) via a radio access network" (see Fig. 1, Blocks 101, 103), "at least one GGSN" (see Fig. 1, Block 105), and "at least one BM-SC" (see Fig. 1, Block 106), "wherein the SGSN and the GGSN are operatively connected while the GGSN and the BM-SC are operatively connected" (see Fig. 1, Blocks 103, 105, 106);

the method comprising the steps:

Hwang discloses "Creating by a UE, a request message through interaction with the network and sending a joining message to the network via an SGSN which the UE

belongs to" (see ¶ [0064], and Fig. 5, Step 511); and Hwang discloses "after receiving the joining message, implementing, by the network, an authorization to the UE" (see ¶ [0064], and Fig. 5, Step 513), "if the UE has passed the authorization, permitting the UE to activate an MBMS UE Context" (see ¶ [0045]-[0051], and Fig. 4, Step 411-419, Fig. 5, Step 511-531) and "the UE sending a request for activating an MBMS Context which radio access bearer capability of the UE to the SGSN which the UE belongs to" (see ¶ [0084] and Fig. 9A and 9B, Steps 921,923);

Hwang discloses "verifying, by the SGSN before sending a Create MBMS Context Request, whether the radio access bearer capability of the UE are less than access bearer Capabilities, if the SGSN has the Required radio access bearer capability wherein the Required radio access bearer capability are used to identify the maximum QoS ability of the MBMS service requested by the UE" (see ¶ [0050], where Hwang discloses the SGSN 440 determines whether the UE 410 is qualified for receiving the corresponding MBMS service, depending on the initial UE identity included in the received Authentication request message, therefore, SGSN is verifying the capability..., see ¶ [0051], The SGSN 440 transmits an Authentication confirm message to the TRNC 430 along with information indicating whether the UE 410 has qualification for receiving the MBMS service and information on the types of the MBMS services that the UE 410 is currently receiving (Step 417)..., see ¶ [0065], the TRNC 430 determines whether it can continuously provide the requested MBMS service to the UE 410..., see ¶ [0069], .. Upon receiving the MBMS service request message, the SGSN 440 detects an MBMS Service ID included in the MBMS service request message, and transmits an

MBMS RAB setup request message to the TRNC 430 in order to set up a radio access bearer (RAB) for transmitting MBMS data corresponding to the detected MBMS Service ID (Step 521)..., therefore, ..therefore, SGSN is verifying radio access bearer capability); and Hwang discloses "rejecting, by the SGSN, the request for activating an MBMS Context if the MBMS bearer capabilities of the UE are less than the Required MBMS Bearer Capabilities, or creating an the MBMS UE Context if the MBMS bearer capabilities of the UE are not less than the Required MBMS Bearer Capabilities" (see ¶ [0029], the Gateway GPRS Service Node (GGSN) initiates policy requests at packet data protocol (PDP) context activation or modification..., see ¶ [0032], The MBMS service parameters can be used in the GGSN for setting the accurate QoS profile for the MBMS bearer).

Although, Hwang discloses "radio access bearer capability and using message context", however, Hwang does not particularly disclose "carries MBMS bearer capabilities and using Packet Data Protocol (PDP) Context". In an analogous field of endeavor, attention is directed to Alakoski, which teaches "carries MBMS bearer capabilities and using Packet Data Protocol (PDP) Context" (see ¶ [0029], the Gateway GPRS Service Node (GGSN) initiates policy requests at packet data protocol (PDP) context activation or modification..., see ¶ [0032], The MBMS service parameters can be used in the GGSN for setting the accurate QoS profile for the MBMS bearer).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was make to modify the Hwang invention, and have carries MBMS bearer capabilities and using Packet Data Protocol (PDP) Context, as taught by

Alakoski, thereby, providing the methods to enhancing the network capability to add new feature to the system, as discussed by Alakoski, (see ¶s [0005]-[0008]).

Consider claim 24, “a fourth unit, adapted to send a rejection message which carries a rejection reason to the UE” (see Hwang, ¶ [0051], Fig. 4, the TRNC 430 analyzes information included in the received Authentication confirm message, and transmits an RRC connection reject message to the UE 410).

Consider claim 25, “a fifth unit, adapted to send a failure message which carries a failure reason to a Gateway GPRS Support Node (GGSN)” (see Hwang, ¶ [0007], Fig. 1, a gateway GPRS support node (GGSN) 105).

Claims 3-6, 9-12, 14-17, 21, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 20040147266 (hereinafter Hwang) in view of US Patent Application Publication 20040073928 (hereinafter Alakoski) and further in view of US Patent Application Publication 20040266440 (hereinafter Fuchs).

Consider claims 3, 4, Hwang and Alakoski disclose multicast, however, Hwang and Alakoski do not particularly disclose “an IP multicast access of a unicast mode”. However, attention is directed to Fuchs, which teaches “an IP multicast access of a unicast mode” (see ¶ [0062], The IP addresses receiving cellular multicast handling may include a subset of IP multicast addresses and/or a group of IP unicast addresses).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was make to combine the Hwang and Alakoski inventions, and have an IP multicast access of a unicast mode, as taught by Fuchs, thereby, providing

the method for improving bandwidth in mobile system, as discussed by Fuchs, (see ¶ [0003]-[0009]).

Consider claims 5 and 6 have limitations similar to those treated in the above rejection(s), and are met by the references as discussed above. Also see Hwang, ¶ [0051], .. The SGSN 440 transmits an Authentication confirm message to the TRNC 430 along with information indicating whether the UE 410 has qualification for receiving the MBMS service and information on the types of the MBMS services that the UE 410 is currently receiving (Step 417).. ).

Consider claim 9, Hwang discloses "activating a timer after the step a2 of sending the message which carries the MBMS bearer capabilities of the UE, stopping the timer if the UE receives an accepting message or the GGSN returns back to the IP multicast access of the unicast mode before Ume-out of the timer, and reapplying to receive the MBMS bearer service through the unicast mode if the timer being overtime" (see ¶ [0054], where Hwang discusses all the time required to connection setup and connection reject).

Consider claim 10, "wherein the rejection message carries the Required MBMS Bearer Capabilities, the UE compares the Required MBMS Bearer Capabilities with the MBMS bearer capabilities of the UE after receiving the rejection message" (see Alakoski, ¶ [0029], the Gateway GPRS Service Node (GGSN) initiates policy requests at packet data protocol (PDP) context activation or modification..., see ¶ [0032], The MBMS service parameters can be used in the GGSN for setting the accurate QoS profile for the MBMS bearer), and "the UE reapplies to receive the MBMS bearer



service through the unicast mode if the MBMS bearer capabilities of the UE are less than the Required MBMS Bearer Capabilities" (see Fuchs, ¶ [0062], The IP addresses receiving cellular multicast handling may include a subset of IP multicast addresses and/or a group of IP unicast addresses).

Consider claims 11, 15, 21, "wherein the rejection message carries the Required MBMS Bearer Capabilities, the UE compares the Required MBMS Bearer Capabilities with the MBMS bearer capabilities of the UE after receiving the rejection message" (see Hwang, ¶ [0052], The RRC connection reject message is a message used when a UTRAN (UMTS (Universal Mobile Telecommunications System) Radio Access Network) rejects an RRC connection requested by a UE), and "the UE reapplies to receive the MBMS bearer service through the unicast mode if the MBMS bearer capabilities of the UE are less than the Required MBMS Bearer Capabilities and the GGSN does not return back to the IP multicast access of the a unicast mode" (see Fuchs, ¶ [0062], The IP addresses receiving cellular multicast handling may include a subset of IP multicast addresses and/or a group of IP unicast addresses).

Consider claims 12, 16, "wherein in the Step b, if the SGSN has not the Required MBMS Bearer Capabilities and if the MBMS bearer capabilities of the UE are less than the Required MBMS Bearer Capabilities, the SGSN deactivates the created MBMS UE Context, and sends a failure message to a GGSN; the GGSN receives the failure message and decides whether to return back to an IP multicast access of a unicast mode" (see Hwang, ¶ [0087], .. when the UE 910 fails to receive messages for the RRC connection for a predetermined time in an RRC connection state..., the UE 910 notifies

release of an RRC connection by transmitting an RRC connection release confirm message to the SRNC 920 (Step 927)).

Consider claim 14, "wherein the SGSN sends the failure message to the GGSN which creates a PDP Context with the UE, or to the GGSN which creates an MBMS UE Context with the UE" (see Alakoski, ¶ [0029], the Gateway GPRS Service Node (GGSN) initiates policy requests at packet data protocol (PDP) context activation or modification..., see ¶ [0032], The MBMS service parameters can be used in the GGSN for setting the accurate QoS profile for the MBMS bearer).

Consider claim 17, "wherein the rejection message sent from the SGSN to the UE carries the Required MBMS Bearer Capabilities; the UE compares the Required MBMS Bearer Capabilities with the MBMS bearer capabilities of the UE after receiving the rejection message" (see Hwang, ¶ [0052], The RRC connection reject message is a message used when a UTRAN (UMTS (Universal Mobile Telecommunications System) Radio Access Network) rejects an RRC connection requested by a UE), and the UE reapplies to receive the MBMS bearer service through the unicast mode if the MBMS bearer capabilities of the UE are less than the Required MBMS Bearer Capabilities" (see Fuchs, ¶ [0062], The IP addresses receiving cellular multicast handling may include a subset of IP multicast addresses and/or a group of IP unicast addresses).

Consider claim 22, "further comprising: sending a rejection message to the UE if the MBMS bearer capabilities of the UE are less than the Required MBMS Bearer Capabilities" (see Hwang, ¶ [0052], The RRC connection reject message is a message

used when a UTRAN (UMTS (Universal Mobile Telecommunications System) Radio Access Network) rejects an RRC connection requested by a UE).

*Allowable Subject Matter*

Claims 8, 13, 20 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**(10) Response to Argument**

Appellant argues with respect to claim 1 that Neither Hwang, nor Alakoski, nor any combination thereof, teaches or suggests, at least, "the UE sending a request for activating an MBMS Context which carries MBMS bearer capabilities of the UE to the SGSN which the UE belongs to," as recited in claim 1. (See Brief, page 7). However, Examiner respectfully disagrees.

Hwang discloses UE send activate MBNS content request to SGSN and SGSN send response of activate MBNS content to UE. Then the SGSN and SRNC setup the RAB (Radio Access Bearer), after setup completed SRNC send the RB (Radio Bearer) notification to UE. (see ¶ [0084] - ¶ [0091], Fig. 9A-9B, steps 921, 923, 929-941). Therefore, Hwang discloses the UE sending a request for activating an MBMS Context which carries MBMS bearer capabilities of the UE to the SGSN which the UE belongs to.

Appellant argues with respect to claim 1 that Hwang and Alakoski also fail to teach or suggest "verifying, by the SGSN before sending a Create MBMS Context

Request, whether the MBMS bearer capabilities of the UE are less than Required MBMS Bearer Capabilities if the SGSN has the Required MBMS Bearer Capabilities" as recited in claim 1. (See Brief, page 8). However, Examiner respectfully disagrees.

Hwang discloses the SGSN determines whether the UE is qualified for receiving the corresponding MBMS service, depending on the initial UE identity included in the received Authentication request message and the SGSN transmits an Authentication confirm message to the TRNC along with information indicating whether the UE has qualification for receiving the MBMS service, Then based on the qualification of UE the SGSN and TRNC will setup the radio access bearer (RAB) (see ¶ [0050], ¶ [0051], ¶ [0065] - ¶ [0069]). Therefore, Hwang discusses verifying, by the SGSN before sending a Create MBMS Context Request, whether the MBMS bearer capabilities of the UE are less than Required MBMS Bearer Capabilities if the SGSN has the Required MBMS Bearer Capabilities.

Appellant argues with respect to claim 1 that Hwang and Alakoski further fail to teach or suggest "rejecting, by the SGSN, the request for activating an MBMS Context if the MBMS bearer capabilities of the UE are less than the Required MBMS Bearer Capabilities, or creating the MBMS UE Context if the MBMS bearer capabilities of the UE are not less than the Required MBMS Bearer Capabilities" as recited in claim 1. (See Brief, page 10). However, Examiner respectfully disagrees.

Hwang discloses SGSN and TRNC analyze information included in the received Authentication confirm message, and transmits an RRC connection reject message to the UE along with MBMS Service ID indicating a type of the MBMS service that the UE

410 will receive and RB information necessary for the MBMS service (RRC connection reject [RB info, Service ID]) (see ¶ [0051], Fig. 4, ¶ [0097] - ¶ [0098]). Therefore, Hwang discusses rejecting, by the SGSN, the request for activating an MBMS Context if the MBMS bearer capabilities of the UE are less than the Required MBMS Bearer Capabilities, or creating the MBMS UE Context if the MBMS bearer capabilities of the UE are not less than the Required MBMS Bearer Capabilities.

Although, Hwang discloses radio access bearer capability and using message context, however, Hwang does not particularly disclose carries MBMS bearer capabilities and using Packet Data Protocol (PDP) Context. In an analogous field of endeavor, attention is directed to Alakoski, which teaches carries MBMS bearer capabilities and using Packet Data Protocol (PDP) Context (see ¶ [0029], the Gateway GPRS Service Node (GGSN) initiates policy requests at packet data protocol (PDP) context activation or modification..., see ¶ [0032], The MBMS service parameters can be used in the GGSN for setting the accurate QoS profile for the MBMS bearer).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was make to modify the Hwang invention, and have carries MBMS bearer capabilities and using Packet Data Protocol (PDP) Context, as taught by Alakoski, thereby, providing the methods to enhancing the network capability to add new feature to the system, as discussed by Alakoski, (see ¶s [0005]-[0008]).

Dependent claims 3-6, 9-12, 14-17, 21 and 22 are not allowable for at least the reason that they depend on rejected independent claim 1 above.

Dependent claims 2, 7, 18 and 19 have been canceled.

Dependent claims 8, 13, 20 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**(11) Related Proceeding(s) Appendix**

None.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/CHUONG A NGO/

Examiner, Art Unit 2617

Conferees:

/LESTER KINCAID/

Supervisory Patent Examiner, Art Unit 2617

/George Eng/

Supervisory Patent Examiner, Art Unit 2617